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DEPARTMENT FOR ENVIRONMENTAL PROTECTION

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DIVISION OF WATER  
200 FAIR OAKS LANE  
FRANKFORT, KENTUCKY 40601  
[www.kentucky.gov](http://www.kentucky.gov)

**FACT SHEET**

**KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE TREATED WASTEWATER  
INTO WATERS OF THE COMMONWEALTH**

KPDES No.: KY0003271      Permit Writer: Mahmoud Sartipi      Date: September 13, 2009  
AI No.: 3077

1. **SYNOPSIS OF APPLICATION**

a. Name and Address of Applicant

NRE Acquisition Co LLC  
1300 Kentucky Avenue  
Paducah, Kentucky 42003

b. Facility Location

VMV Paducahbilt  
1300 Kentucky Avenue  
Paducah, McCracken County, Kentucky 42003

c. Description of Applicant's Operation

Maintenance and rebuilding of Diesel Locomotives

d. Production Capacity of Facility

Not applicable

e. Description of Existing Pollution Abatement Facilities

Outfall 001 - Combined wastewater; Storm water, boiler blowdown, cooling water, locomotive tank defueling wastewater, and floor wash water.

f. Permitting Action

Modification: Replacing the assumed Hardness value of 100 mg/l with an actual Hardness average value of 231 mg/l, which is based on twelve months of data. This has caused the permit Lead limitations to be changed to monitor only.

2. **RECEIVING WATERS**

a. Receiving Water Name

Outfall 001 - Discharges to UT of Island Creek via city storm sewer at Latitude of 37° 04' 50" and Longitude of 88° 36' 28''

b. Stream Segment Use Classifications

The unnamed tributary of Island Creek is classified as Warmwater Aquatic Habitat, Primary/Secondary Contact Recreation, and Domestic Water Supply.

c. Stream Segment Antidegradation Categorization

The Island Creek of Tennessee River from river mile 0.0 to 5.5 is classified as impaired on the 2004 303(d) List of Waters for Kentucky. The impaired uses are Swimming (Nonsupport), and aquatic life (Partial support). The pollutants of concern are Pathogens and Unknown. The suspected sources are Unknown. The segment is listed as a 1st priority for TMDL development. Review of the renewal application for this permit does not indicate a source of concern. Thus, the permit issuance does not contribute to the existing impairment.

d. Stream Low Flow Condition

At the point of discharge, the 7Q10 and the Harmonic Mean for the unnamed tributary of Island Creek are unknown.

At Paducah Water Works intake, the nearest downstream public water supply, the 7Q10 and the Harmonic Mean for the Ohio River are 51,000 and 175,000 cfs, respectively.

### 3. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Outfall 001 - Combined wastewater; Storm water, boiler blowdown, cooling water, locomotive tank defueling wastewater, and floor wash water.

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	0.1745	0.1746	Report	Report	401 KAR 5:065, Section 2(8)
Oil & Grease (mg/l)	7.90	15	10	15	401 KAR 5:080, Section 1(2)(c)2
Total Suspended Solids (mg/l)	11.41	50	30	60	401 KAR 5:080, Section 1(2)(c)2
Temperature °C(°F)	19.17	34.4	NA	31.7(89)	401 KAR 10:031, Section 4
Total Recoverable Cadmium (µg/l)	0.176	1.57	Report	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Lead (µg/l)	6.460	21.9	Report	Report	401 KAR 5:065, Section 2(8)
Hardness (as mg/l CaCO <sub>3</sub> )	NA	NA	Report	Report	401 KAR 5:065, Section 2(8)
Fluorene (µg/l)	NA	NA	Report	Report	401 KAR 5:065, Section 2(8)
Acenaphthene (µg/l)	NA	NA	Report	Report	401 KAR 5:065, Section 2(8)
Phenanthrene (µg/l)	NA	NA	Report	Report	401 KAR 5:065, Section 2(8)
Fluoranthene (µg/l)	NA	NA	Report	Report	401 KAR 5:065, Section 2(8)
pH (min/max)	7.37	8.11	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4

The data contained under the reported discharge columns is not from the renewal application, but rather from the analysis of the DMR data that has been reported during the term of the current permit.

4. **METHODOLOGY USED IN DETERMINING LIMITATIONS**

a. Serial Number

Outfall 001 - Combined wastewater; Storm water, boiler blowdown, cooling water, locomotive tank defueling wastewater, and floor wash water.

b. Effluent Characteristics

Total Recoverable Cadmium	Fluoranthene	Oil & Grease
Total Suspended Solids	Acenaphthene	pH
Total Recoverable Lead	Temperature	Flow
Phenanthrene	Fluorene	Hardness

c. Pertinent Factors

None.

d. Monitoring Requirements

Instantaneous flow measurements shall be collected once per month.

Total Suspended Solids, Oil & Grease, Cadmium (TR), Lead (TR), Hardness, Fluoranthene, Acenaphthene, Phenanthrene, Fluorene, Temperature and pH shall be monitored once per month by grab sample.

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow, Fluorene, Fluoranthene, Acenaphthene, Phenanthrene, Hardness, Total Recoverable Lead, and Cadmium (TR)

The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8).

Oil & Grease and Total Suspended Solids

The limits and requirements for these parameters are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "Best Professional Judgement" (BPJ) determination of the "Best Practicable Control Technology Currently Available" (BPT) and "Best Available Technology Economically Achievable" (BAT) requirements for these types of discharges.

Temperature and pH

The limits and requirements for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4.

5. **ANTIDEGRADATION**

The conditions of 401 KAR 10:029, Section 1 have been satisfied by this permit action. This permit action involves the reissuance of a permit with an existing discharge to an "impaired waters". Therefore, a review under 401 KAR 10:030 Section 1 is not applicable.

6. **PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS**

Permittee shall comply with the effluent limitations by the effective date of the permit.

7. **PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE**

**Best Management Practices (BMP) Plan**

Pursuant to 401 KAR 5:065, Section 2(10), a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through storm water runoff or spillage. Some of these areas will drain to present wastewater treatment plants, others will not.

**Outfall Signage**

As a member of ORSANCO (Ohio River Valley Sanitation Commission) the Commonwealth of Kentucky through the Division of Water implements a requirement that the permittee post a permanent marker at each discharge point to the Ohio River. It is the Best Professional Judgment of the Division of Water, 401 KAR 5:080, Section 1(2)(c)2, that all permittees post a marker at all discharge locations and/or monitoring points. The ORSANCO requirements for the marker specify it to be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and is to be posted as near as possible to the actual sampling location.

8. **PERMIT DURATION**

Five (5) years. This facility is in the Tennessee/Mississippi/Cumberland Basin Management Unit as per the Kentucky Watershed Management Framework.

9. **PERMIT INFORMATION**

The application, draft permit fact sheet, public notice, comments received, and additional information is available by writing the Division of Water at 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601.

10. **REFERENCES AND CITED DOCUMENTS**

All material and documents referenced or cited in this fact sheet are parts of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

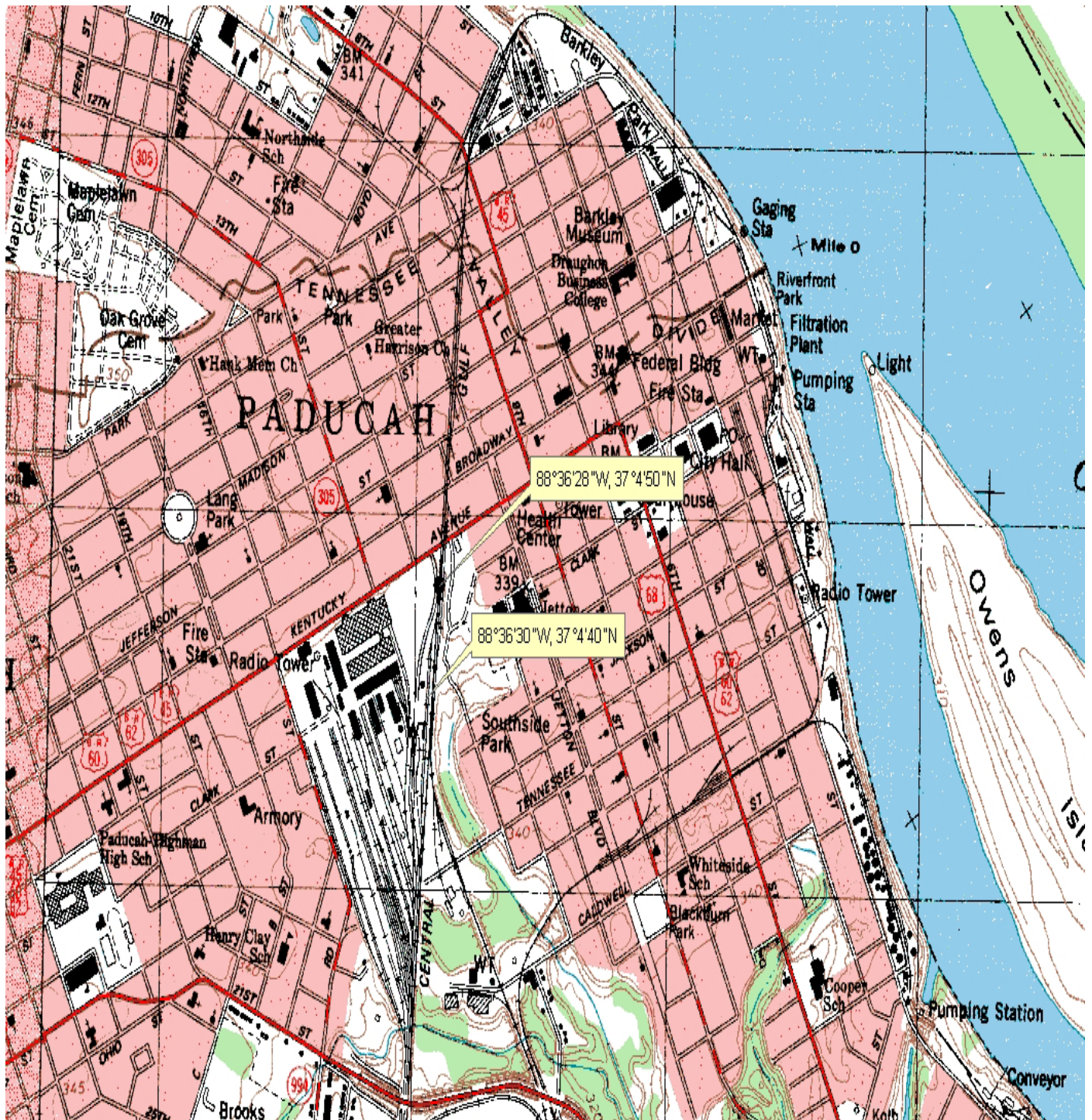
11. **CONTACT**

For further information contact the individual identified on the Public Notice or the Permit Writer - Mahmoud Sartipi at (502) 564-2225, extension 446 or e-mail Mahmoud.Sartipi@ky.gov.

12. **PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final permit decision, deadline for comments, and other information required by 401 KAR 5:075, Section 4(2)(e).





**STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001**

Permit Writer	Mahmoud Sartipi	
Date Entered	9/3/2009	
Facility Name	VMV Paducahbilt	
KPDES Number	KY0003271	
Outfall Number	001	
Case	Modification	
Status:		
Is this an existing facility – Enter “E”	E	
Is this an existing facility with an increase in pollutant load – Enter “I”		
Is this a new facility – Enter “N”		
Is this a regional facility with an approved up-to-date 201 plan – Enter “R”		
Has the permittee made a successful alternatives analysis/socioeconomic demonstration – Enter “A”		
Receiving Water Name	UT of Island Creek	
Discharge Mile Point	1.52	
Public Water Supply Name	Paducah Water Works	
Intake Water Name	Paducah Water Works	
Intake Mile Point	45.8	
Total Effluent Flow ( $Q_T$ )	0.17	MGD
Receiving Water 7Q10 ( $Q_{RW7Q10}$ )	0.09	cfs
Receiving Water Harmonic Mean ( $Q_{RWHM}$ )	0.85	cfs
Receiving Water pH	7.5	SU
Receiving Water Temperature	20.00	°C
Intake Water 7Q10 ( $Q_{IW7Q10}$ )	51000	cfs
Intake Water Harmonic Mean ( $Q_{IWHM}$ )	175000	cfs
Effluent Hardness	231	(as mg/l CaCO3)
Receiving Water Hardness	100	(as mg/l CaCO3)
Zone of Initial Dilution (ZID)	1	
Mixing Zone (MZ)	0.333	
Acute to Chronic Ratio (ACR)	0.1	
Impaired	Yes	
Permittee agrees to accept no mixing zone for bioaccumulative or persistent pollutants prior to 09/08/2014	No	



# STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

## Calculation Methodology

### Definitions

Acute to Chronic Ratio  
 Aquatic Life Acute Criteria  
 Aquatic Life Chronic Criteria  
 Human Health Criteria - Fish Only  
 Human Health Criteria - Fish & Water  
 End of Pipe Effluent Limit  
 Instream Background Concentration  
 Toxicity Units - Acute  
 Effluent Hardness

ACR  
 $C_A$   
 $C_C$   
 $C_{HHFO}$   
 $C_{HHFW}$   
 $C_T$   
 $C_U$   
 $TU_a$   
 $H_T$

Total Effluent Flow  
 Receiving Water 7Q10  
 Receiving Water Harmonic Mean  
 Intake Water 7Q10  
 Intake Water Harmonic Mean  
 Zone of Initial Dilution  
 Mixing Zone  
 Toxicity Units - Chronic  
 Receiving Water Hardness

$Q_T$   
 $Q_{RW7Q10}$   
 $Q_{RWHM}$   
 $Q_{IW7Q10}$   
 $Q_{IWHM}$   
 ZID  
 MZ  
 $TU_c$   
 $H_{RW}$

### Aquatic Life - Chemical Specific

#### Acute

NO ZID given  $C_T = C_A$   
 ZID given  $C_T = (C_A - C_U) \times (ZID)$

#### Chronic Mixing Zone / Complete Mix

$$C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\} / Q_T$$

### Human Health - Chemical Specific

#### Fish Only: Mixing Zone / Complete Mix

Carcinogen / Non-Carcinogen  $C_T = \{C_{HHFO}[Q_T + (MZ)(Q_{RWHM})] - C_U(MZ)(Q_{RWHM})\} / Q_T$

#### Fish & Water Only: Mixing Zone / Applicable at point of withdrawal

Carcinogen  $C_T = \{C_{HHFW}[Q_T + (Q_{IWHM})] - C_U(Q_{IWHM})\} / Q_T$   
 Non-Carcinogen  $C_T = \{C_{HHFW}[Q_T + (Q_{IW7Q10})] - C_U(Q_{IW7Q10})\} / Q_T$

### Aquatic Life - Whole Effluent Toxicity

#### Acute (Units $TU_a$ )

NO ZID given  $C_T = C_A$   
 ZID given  $C_T = (C_A - C_U) \times (ZID)$

#### Chronic Mixing Zone / Complete Mix (Units $TU_c$ )

$C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\} / Q_T$   
 Conversion of  $TU_c$  to  $TU_a$ :  $TU_c \times ACR = TU_a$

## STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

### Metal Aquatic Criteria

#### Pollutant

Total Recoverable Cadmium  
 Chromium III  
 Total Recoverable Copper  
 Total Recoverable Lead  
 Total Recoverable Nickel  
 Total Recoverable Silver  
 Total Recoverable Zinc

#### Acute Criteria

$e^{(1.0166 (\ln \text{Hardness}) - 3.924)}$   
 $e^{(0.8190 (\ln \text{Hardness}) + 3.7256)}$   
 $e^{(0.9422 (\ln \text{Hardness}) - 1.700)}$   
 $e^{(1.273 (\ln \text{Hardness}) - 1.460)}$   
 $e^{(0.8460 (\ln \text{Hardness}) + 2.255)}$   
 $e^{(1.72 (\ln \text{Hardness}) - 6.59)}$   
 $e^{(0.8473 (\ln \text{Hardness}) + 0.884)}$

#### Chronic Criteria

$e^{(0.7409 (\ln \text{Hardness}) - 4.719)}$   
 $e^{(0.8190 (\ln \text{Hardness}) + 0.6848)}$   
 $e^{(0.8545 (\ln \text{Hardness}) - 1.702)}$   
 $e^{(1.273 (\ln \text{Hardness}) - 4.705)}$   
 $e^{(0.8460 (\ln \text{Hardness}) + 0.0584)}$   
 $e^{(0.8473 (\ln \text{Hardness}) + 0.884)}$

#### Hardness (as mg/l CaCO<sub>3</sub>)

Zone Initial Dilution (ZID)  
 Mixing Zone

$$H_{RW} + [H_T + H_{RW}]/ZID$$

$$[(Q_{RW7Q10})(MZ)(H_{RW}) + (Q_T)(H_T)]/[(Q_{RW7Q10})(MZ) + (Q_T)]$$

#### Total Ammonia Criteria

Chronic - applies state wide - unionized criteria of 0.05 mg/l

Acute - applies to the Ohio River (ORSANCO Criteria)

$$[0.05 * (1 + 10^{(pKa - pH)})] / 1.2$$

$$[0.411 / (1 + 10^{(7.204 - pH)})] + [58.4 / (1 + 10^{(pH - 7.204)})]$$

$$pKa = (0.0902 + (2730 / (273.1 + T)))$$

T = Temperature °C

### Bioaccumulative or Persistent

For new facilities after September 8, 2004 mixing zones shall not be granted for bioaccumulative or persistent pollutants of concern.

Mixing zones for bioaccumulative or persistent pollutants of concern assigned prior to September 8, 2004 shall expire no later than September 8, 2014, unless the permittee agrees to expiration of the mixing zone prior to that date.

Therefore, the application of the more stringent criteria of Human Health Fish & Water Consumption, Human Health Fish Only Consumption, and Aquatic Life Chronic shall apply as end-of-pipe effluent limitations.

### Antidegradation

If a new facility or an existing facility that will have a pollutant load increase, the effluent limits are halved unless the receiving stream is impaired or the permittee has demonstrated a negative socioeconomic or cost benefit analysis.

## **STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001**

### **Reasonable Potential Analysis**

In establishing water quality based effluent conditions the Division of Water must determine if the pollutant concentrations in the discharge will cause, have the reasonable potential to cause, or contribute to an excursion of any water standard. The process by which the Division of Water makes this determination is known as a Reasonable Potential Analysis.

A Reasonable Potential Analysis is performed by first calculating the expected effluent limitations for those pollutants with water quality criteria. The calculated limits are then compared to the concentrations reported on the KPDES permit application and/or a summarization of the values reported on the Discharge Monitoring Report (DMRs) submitted during the term of the permit. This comparison is made by dividing the reported value by the calculated effluent limitation and converting to a percentage. The following criteria are used in determining how the pollutant will be addressed in the permit.

### **New Permits or New Pollutants on Permit Renewals**

If the reported concentration is less than 70% of the calculated effluent limit then no monitoring or limitations will be required.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is less than 12 then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is equal or greater than 12 then an effluent limitation will be required.

### **Permit Renewals - Existing Pollutants**

If the reported concentration is less than 70% of the calculated effluent limit then and the source of the reported concentration was the DMRs for that facility and there were more than 12 DMRs utilized to determine the reported concentrations then the pollutant will be removed from the permit.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% then an effluent limitation will be required.

In all cases, the Division of Water still may exercise its Best Professional Judgment in the implementation of the results.

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Chloride	16887006	0.000000	0.000000	668.331600	1,200.000000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Residual Chlorine		0.000000	0.000000	0.012253	0.019000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Color		0.000000	0.000000	14,535.075000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Fluoride		0.000000	0.000000	387,602.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Nitrate-Nitrite (as N)	14797558	0.000000	0.000000	1,938,010.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Alpha		0.000000	0.000000	NA	15.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Beta		0.000000	0.000000	NA	50.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Radium		0.000000	0.000000	NA	5.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Sulfate (as SO4)		0.000000	0.000000	48,450,250.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Surfactants		0.000000	0.000000	96,900.500000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Barium	7440393	0.000000	0.000000	193,801.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Iron	7439896	0.000000	0.000000	1.113886	4.000000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Antimony	7440360	0.000000	0.000000	1.328378	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Total Recoverable Arsenic	7440382	0.000000	0.000000	0.167083	0.340000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Beryllium	7440417	0.000000	0.000000	775.204000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Cadmium	7440439	0.000000	0.000000	0.000525	0.004997	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Chromium	7440439	0.000000	0.000000	19,380.100000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Copper	7440508	0.000000	0.000000	0.019698	0.030810	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Lead	7439921	0.006460	0.021900	0.009189	0.237033	70.30%	9.24%	DMR	57	Monitoring	Remove	Chronic	Acute
Total Recoverable Mercury	7439976	0.000000	0.000000	0.000106	0.001700	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Total Recoverable Nickel	7440020	0.000000	0.000000	0.109442	0.952686	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Selenium	7782492	0.000000	0.000000	0.005569	0.020000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Silver	7440224	0.000000	0.000000	NA	0.015974	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Recoverable Thallium	7440280	0.000000	0.000000	0.013076	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Total Recoverable Zinc	7440666	0.000000	0.000000	0.243559	0.243559	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Free Cyanide	57125	0.000000	0.000000	0.005792	0.022000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
2,3,7,8 Tetrachlorodibenzo P Dioxin	1746016	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acrolein	107028	0.000000	0.000000	0.601921	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acrylonitrile	107131	0.000000	0.000000	0.000519	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzene	71432	0.000000	0.000000	0.105855	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bromoform	75252	0.000000	0.000000	0.290583	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Carbon Tetrachloride	56235	0.000000	0.000000	0.003321	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chlorobenzene	108907	0.000000	0.000000	43.587390	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chlorodibromomethane	124481	0.000000	0.000000	0.026983	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chloroform	67663	0.000000	0.000000	0.975527	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dichlorobromomethane	75274	0.000000	0.000000	0.035285	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Dichloroethane	107062	0.000000	0.000000	0.076797	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,1-Dichloroethylene	75354	0.000000	0.000000	0.006642	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Dichloropropane	78875	0.000000	0.000000	0.031134	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,3-Dichloropropene	542756	0.000000	0.000000	3.528503	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Ethylbenzene	100414	0.000000	0.000000	60.192110	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Methyl Bromide	74839	0.000000	0.000000	3.113385	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Methylene Chloride	75092	0.000000	0.000000	1.224598	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,1,2,2-Tetrachloroethane	79345	0.000000	0.000000	0.008302	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Tetrachloroethylene	127184	0.000000	0.000000	0.006849	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Toluene	108883	0.000000	0.000000	415.118000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Trans-Dichloroethylene	156605	0.000000	0.000000	290.582600	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,1,1-Trichloroethane	71556	0.000000	0.000000	38,760.200000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,1,2-Trichloroethane	79005	0.000000	0.000000	0.033209	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Trichloroethylene	79016	0.000000	0.000000	0.062268	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Vinyl Chloride	75014	0.000000	0.000000	1.100063	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2-Chlorophenol	95578	0.000000	0.000000	0.311339	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dichlorophenol	120832	0.000000	0.000000	0.601921	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
2,4-Dimethylphenol	105679	0.000000	0.000000	1.764252	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dinitrophenol	51285	0.000000	0.000000	11.000627	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Pentachlorophenol	87865	0.000000	0.000000	0.006227	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Phenol	108952	0.000000	0.000000	3,528.503000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4,6-Trichlorophenol	88062	0.000000	0.000000	0.004981	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acenaphthene	83329	0.000000	0.000000	2.054834	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Anthracene	120127	0.000000	0.000000	83.023600	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzidine	92875	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(a)anthracene	56553	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(a)pyrene	50328	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(k)fluoranthene	205992	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-chloroisopropyl)ether	108601	0.000000	0.000000	134.913350	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-ethylhexyl)phthalate	117817	0.000000	0.000000	0.004566	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Butylbenzyl phthalate	85687	0.000000	0.000000	3.943621	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2-Chloronaphthalene	91587	0.000000	0.000000	3.320944	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chrysene	218019	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dibenzo(a,h)anthracene	53703	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Dichlorobenzene	95501	0.000000	0.000000	35.285030	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,3-Dichlorobenzene	541731	0.000000	0.000000	1.992566	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,4-Dichlorobenzene	106467	0.000000	0.000000	5.396534	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
3,3-Dichlorobenzidine	91941	0.000000	0.000000	0.000058	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Diethyl phthalate	84662	0.000000	0.000000	91.325960	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dimethyl phthalate	131113	0.000000	0.000000	2,283.149000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Di-n-butyl phthalate	84742	0.000000	0.000000	9.340155	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dinitrotoluene	121142	0.000000	0.000000	0.007057	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Diphenylhydrazine	122667	0.000000	0.000000	0.000415	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Fluoranthene	206440	0.000000	0.000000	0.290583	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Fluorene	86737	0.000000	0.000000	11.000627	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorobenzene	118741	0.000000	0.000000	0.000001	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorobutadiene	87683	0.000000	0.000000	0.037361	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorocyclopentadiene	77474	0.000000	0.000000	35.285030	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachloroethane	67721	0.000000	0.000000	0.006849	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Ideno(1,2,3-cd)pyrene	193395	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Isophorone	78591	0.000000	0.000000	1.992566	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Nitrobenzene	98953	0.000000	0.000000	1.432157	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodimethylamine	62759	0.000000	0.000000	0.006227	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodi-n-Propylamine	621647	0.000000	0.000000	0.001059	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodiphenylamine	86306	0.000000	0.000000	0.012454	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Pyrene	129000	0.000000	0.000000	8.302360	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2,4-Trichlorobenzene	120821	0.000000	0.000000	1.951055	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Aldrin	309002	0.000000	0.000000	0.000000	0.003000	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
alpha-BHC	319846	0.000000	0.000000	0.000010	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Beta-BHC	319857	0.000000	0.000000	0.000035	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
gamma-BHC (Lindane)	58899	0.000000	0.000000	0.000131	0.000950	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Chlordane	57749	0.000000	0.000000	0.000002	0.002400	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
4,4'-DDT	50293	0.000000	0.000000	0.000000	0.001100	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
4,4'-DDE	72559	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
4,4'-DDD	72548	0.000000	0.000000	0.000001	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dieldrin	60571	0.000000	0.000000	0.000000	0.000240	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Alpha-Endosulfan	959988	0.000000	0.000000	0.000062	0.000220	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Beta-Endosulfan	33213659	0.000000	0.000000	0.000062	0.000220	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Endosulfan sulfate	1031078	0.000000	0.000000	0.184728	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Endrin	72208	0.000000	0.000000	0.000040	0.000086	0.00%	0.00%	No Data	0	None	None	Chronic	Acute

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Endrin aldehyde	7421934	0.000000	0.000000	0.000623	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Heptachlor	76448	0.000000	0.000000	0.000000	0.000520	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Heptachlor epoxide	1024573	0.000000	0.000000	0.000000	0.000520	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Polychlorinated Biphenyls (PCBs)		0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Toxaphene	8001352	0.000000	0.000000	0.000000	0.000730	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
1,2,4,5-Tetrachlorobenzene	95943	0.000000	0.000000	0.002283	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2-methyl-4,6-dinitrophenol	534521	0.000000	0.000000	0.581165	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-D	94757	0.000000	0.000000	46,550.070000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4,5-TP (Silvex)	93721	0.000000	0.000000	1,938.010000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4,5-trichlorophenol	95954	0.000000	0.000000	7.472124	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Asbestos	1332214	0.000000	0.000000	4,655,007,000.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Benzo(b)fluoranthene	205992	0.000000	0.000000	0.000037	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-chloroethyl)ether	111444	0.000000	0.000000	0.001100	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(chloromethyl)ether	542881	0.000000	0.000000	0.000001	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chloropyrifos	2921882	0.000000	0.000000	0.000046	0.000083	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chromium (III)	16065831	0.000000	0.000000	0.177195	3.579363	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chromium (VI)	18540299	0.000000	0.000000	0.012253	0.016000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Demeton	8065483	0.000000	0.000000	0.000111	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Dinitrophenols	25550587	0.000000	0.000000	11.000627	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Guthion	86500	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Hexachlorocyclo-hexane-Technical	319868	0.000000	0.000000	0.000086	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hydrogen Sulfide, Undissociated	7783064	0.000000	0.000000	0.002228	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Malathion	121755	0.000000	0.000000	0.000111	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Methoxychlor	72435	0.000000	0.000000	0.000033	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Mirex	2385855	0.000000	0.000000	0.000001	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Nitrosamines, Other		0.000000	0.000000	0.002574	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodibutylamine	924163	0.000000	0.000000	0.000457	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodiethylamine	55185	0.000000	0.000000	0.002574	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosopyrrolidine	930552	0.000000	0.000000	0.070570	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Parathion	56382	0.000000	0.000000	0.000014	0.000065	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Pentachlorobenzene	608935	0.000000	0.000000	0.003113	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Phthalate esters		0.000000	0.000000	0.003342	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Total Dissolved Solids		0.000000	0.000000	145,350,750.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Tritium		0.000000	0.000000	NA	20,000.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Strontium-90		0.000000	0.000000	NA	8.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Uranium		0.000000	0.000000	NA	0.030000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Ammonia		0.000000	0.000000	3.743672	19.890204	0.00%	0.00%	No Data	0	None	None	Chronic	Acute

Hardness  
Metal limitations are developed using the mixed hardness of the effluent and receiving waters

Chronic 211.37  
Acute 231.00

#### Toxicity

Type of Test  
Chronic

Maximum  
1.11

Units  
TUc

Justification  
Chronic

Percent Effluent  
89.78%

# KPDES



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

# PERMIT

PERMIT NO.: KY0003271  
AI NO.: 3077

### AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

NRE Acquisition CO LLC  
1300 Kentucky Avenue  
Paducah, Kentucky 42003

is authorized to discharge from a facility located at

VMV Paducahbilt  
1300 Kentucky Avenue  
Paducah, McCracken County, Kentucky 42003

to receiving waters named

Outfall 001 - Discharges to UT of Island Creek via city storm sewer at Latitude of 37° 04' 50" and Longitude of 88° 36' 28''

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in PARTS I, II, III, and IV hereof. The permit consists of this cover sheet, and PART I 2 pages, PART II 1 page, PART III 1 page, and PART IV 3 pages.

This permit became effective on September 1, 2007.  
This modified permit shall become effective on  
This permit and the authorization to discharge shall expire at midnight,  
August 31, 2012.

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Sandra L. Gruzesky, Director  
Division of Water



A1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 - Combined wastewater; Storm water, boiler blowdown, cooling water, locomotive tank defueling wastewater, and floor wash water.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	(lbs/day) Monthly Avg.	Daily Max.	Other Units (Specify) Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Month	Instantaneous
Total Suspended Solids (mg/l)	N/A	N/A	30	60	1/Month	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Month	Grab
Temperature °C(°F)	N/A	N/A	NA	31.7(89)	1/Month	Grab
Total Recoverable Lead (µg/l)	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab
Total Recoverable Cadmium (µg/l)	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab
Hardness (as mg/l CaCO <sub>3</sub> )	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab
Acenaphthrene (µg/l)	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab
Fluorene (µg/l)	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab
Fluoranthene (µg/l)	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab
Phenanthrene (µg/l)	N/A	N/A	Report	Report <u>1</u> /	1/Month	Grab

The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/Month by grab sample.

There shall be no discharge of floating solids, visible foam, or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters.

The abbreviation N/A means Not Applicable.

1/ the laboratory sheets reporting the results of each parameter shall be submitted with the Discharge Monitoring Reports (DMRs).



B. Schedule of Compliance

The permittee shall achieve compliance with all requirements on the effective date of this permit.

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PART II  
Page II-1  
Permit No.: KY0003271  
AI No.: 3077

### **STANDARD CONDITIONS FOR KPDES PERMIT**

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

**PART III**

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each month must be reported on a preprinted Discharge Monitoring Report (DMR) Form, which will be mailed to you. Each month's completed DMR must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the month for which monitoring results were obtained.

Division of Water  
Paducah Regional Office  
130 Eagle Nest Drive  
Paducah, Kentucky 42003  
ATTN: Supervisor

Division of Water  
Surface Water Permits Branch  
Permit Support Section  
200 Fair Oaks Lane  
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:086, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

## PART IV

### BEST MANAGEMENT PRACTICES

#### SECTION A. GENERAL CONDITIONS

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.01-010(35) and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

2. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. A Best Management Practices (BMP) plan will be prepared by the permittee unless the permittee can demonstrate through the submission of a BMP outline that the elements and intent of the BMP have been fulfilled through the use of existing plans such as the Spill Prevention Control and Countermeasure (SPCC) plans, contingency plans, and other applicable documents.

3. Implementation

If this is the first time for the BMP requirement, then the plan shall be developed and submitted to the Division of Water within 90 days of the effective date of the permit. Implementation shall be within 180 days of that submission. For permit renewals the plan in effect at the time of permit reissuance shall remain in effect. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be submitted to the Division of Water and implemented as soon as possible.

4. General Requirements

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- b. Establish specific objectives for the control of toxic and hazardous pollutants.
  - (1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants," the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.

- c. Establish specific Best Management Practices to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
- d. Include any special conditions established in part b of this section.
- e. Be reviewed by plant engineering staff and the plant manager.

5. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document," and shall include the following baseline BMPs as a minimum.

- a. BMP Committee
- b. Reporting of BMP Incidents
- c. Risk Identification and Assessment
- d. Employee Training
- e. Inspections and Records
- f. Preventive Maintenance
- g. Good Housekeeping
- h. Materials Compatibility
- i. Security
- j. Materials Inventory

6. SPCC Plans

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

7. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

8. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available upon request to NREPC personnel. Initial copies and modifications thereof shall be sent to the following addresses when required by Section 3:

Division of Water  
Paducah Regional Office  
130 Eagle Nest Drive  
Paducah, Kentucky 42003

Division of Water  
Surface Water Permits Branch  
Permit Support Section  
200 Fair Oaks Lane



ATTN: Supervisor

Frankfort, Kentucky 40601

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9. BMP Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. Modification for Ineffectiveness

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants," then the specific objectives and requirements under paragraphs b and c of Section 4, the permit, and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

SECTION B. SPECIFIC CONDITIONS

Periodically Discharged Wastewaters Not Specifically Covered By Effluent Conditions

The permittee shall include in this BMP plan procedures and controls necessary for the handling of periodically discharged wastewaters such as intake screen backwash, meter calibration, fire protection, hydrostatic testing water, water associated with demolition projects, etc.